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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/998,350

DATE: 12/23/2002 P.6
TIME: 14:13:23

Input Set : A:\PTO.VSK.txt
Output Set: N:\CRF4\12232002\I998350.raw

3 <110> APPLICANT: Roller, Peter P
4 Lang, Ya-ji
5 Lang, Feng-Di T
6 King, Fletcher C
7 Yang, Dajun
4 <120> TITLE OF INVENTION: REDOX-STABLE, NON-PHOSPHORYLATED CYCLIC PEPTIDE INHIBITORS
OF SH2 DOMAIN
10 BINDING TO TARGET PROTEIN, CONJUGATES THEREOF, COMPOSITIONS AND METHODS OF
11 SYNTHESIS AND USE
12 <141> PCTIC REFERENCE: 146-3
13 <141> CURRENT APPLICATION NUMBER: 09/998,350
C--> 16 <141> CURRENT FILING DATE: 2002-12-09
17 <141> PCTIC APPLICATION NUMBER: PCT/US00/15201
18 <141> PCTIC FILING DATE: 2000-06-02
19 <141> PCTIC APPLICATION NUMBER: 60/137,187
20 <141> PCTIC FILING DATE: 1999-06-02
21 <141> NUMBER OF SEQ ID NO: 19
22 <141> SOFTWARE: Patentin version 3.1
23 <141> SEQ ID NO: 1
24 <141> LENGTH: 9
25 <141> TYPE: PRT
26 <141> ORGANISM: Artificial Sequence
27 <141> FEATURE:
28 <141> OTHER INFORMATION: Synthetic
29 <141> FEATURE:
30 <141> NAME-KEY: misc_feature
31 <141> LOCATION: ()..()
32 <141> OTHER INFORMATION: Xaa Gla, which is gamma-carboxy-L-glutamic acid
33 <141> FEATURE:
34 <141> NAME-KEY: misc_feature
35 <141> LOCATION: ()..()
36 <141> OTHER INFORMATION: Tyr at position 9 is an amide, i.e. C(O)NH
37 <141> FEATURE:
38 <141> NAME-KEY: misc_feature
39 <141> LOCATION: ()..()
40 <141> OTHER INFORMATION: Xaa (Gla) and Tyr at position 9 are bridged together, making
this
41 peptide cyclic
42 <40> SEQUENCE: 1

W--> 57 Xaa Leu Tyr Glu Asn Val Gly Met Tyr

58 1 5
59 <40> SEQ ID NO: 1
60 <40> LENGTH: 9
61 <40> TYPE: PRT

64 <213> ORGANISM: Artificial Sequence

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/998,350

DATE: 12/23/2002
TIME: 14:15:23

Input Set : A:\PTO.VSK.txt
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66 <2>0: FEATURE:
67 <2> OTHER INFORMATION: Synthetic
69 <1> FEATURE:
70 <1> NAME/KEY: misc_feature
71 <1> LOCATION: (1)...(1)
72 <1> OTHER INFORMATION: Xaa at position 1 is alpha-amino-adipic acid (Adi)
75 <1> FEATURE:
76 <1> NAME/KEY: misc_feature
77 <1> LOCATION: (4)...(4)
78 <1> OTHER INFORMATION: Xaa at position 4 is Glu or Adi
81 <1> FEATURE:
82 <1> NAME/KEY: misc_feature
83 <1> LOCATION: (9)...(9)
84 <1> OTHER INFORMATION: Tyr at position 9 is an amide, i.e., C(O)NH
85 <1> FEATURE:
86 <1> NAME/KEY: misc_feature
87 <1> LOCATION: (1)...(9)
90 <1> OTHER INFORMATION: Xaa at position 1 and Tyr at position 9 are bridged together,
making this peptide cyclic

91 <1> LENGTH: 2

W--> 96 Xaa Leu Tyr Xaa Asn Val Gly Met Tyr

92 <1> LENGTH: 5
100 <1> SIM IL NO: 3
101 <1> LENGTH: 9
104 <1> TYPE: PRT
105 <1> ORGANISM: Artificial Sequence
106 <1> FEATURE:
107 <1> OTHER INFORMATION: Synthetic
108 <1> FEATURE:
109 <1> NAME/KEY: misc_feature
110 <1> LOCATION: (1)...(1)
111 <1> OTHER INFORMATION: Xaa is any amino acid other than Glu
113 <1> FEATURE:
114 <1> NAME/KEY: misc_feature
115 <1> LOCATION: (9)...(9)
116 <1> OTHER INFORMATION: Tyr at position 9 is an amide, i.e., C(O)NH
117 <1> FEATURE:
118 <1> NAME/KEY: misc_feature
119 <1> LOCATION: (1)...(9)
120 <1> OTHER INFORMATION: Xaa and Tyr at position 9 are bridged together, making this peptide cyclic

121 <1> LENGTH: 3

W--> 129 Xaa Leu Tyr Glu Asn Val Gly Met Tyr

122 <1> LENGTH: 5
123 <1> SIM IL NO: 4
124 <1> LENGTH: 10
125 <1> TYPE: PRT
126 <1> ORGANISM: Artificial Sequence
128 <1> FEATURE:

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/998,350

DATE: 12/23/2002
TIME: 14:13:23

Input Set : A:\PTO.VSK.txt
Output Set: N:\CRF4\12232002\I998350.raw

149 <223> OTHER INFORMATION: Synthetic
150 <210> FEATURE:
151 <211> NAME/KEY: misc_feature
152 <212> LOCATION: (1)..(1)
153 <213> OTHER INFORMATION: Xaa = Gla, which is gamma-carboxy-L-glutamic acid
154 <214> FEATURE:
155 <215> NAME/KEY: misc_feature
156 <216> LOCATION: (10)..(10)
157 <217> OTHER INFORMATION: Cys at position 10 is an amide, i.e., C(O)NH
158 <218> FEATURE:
159 <219> NAME/KEY: misc_feature
160 <220> LOCATION: (1)..(10)
161 <221> OTHER INFORMATION: Xaa (Gla) and Cys are bridged together, making this peptide
cycli
162 <210> SEQUENCE: 4
W--> 162 Xaa Leu Tyr Glu Asn Val Gly Met Tyr Cys
163 <211> LENGTH: 10
164 <212> SEQ_ID_NO: 6
165 <213> LENGTH: 10
166 <214> TYPE: PRT
167 <215> ORIGIN: Artificial Sequence
168 <216> FEATURE:
169 <217> OTHER INFORMATION: Synthetic
170 <218> FEATURE:
171 <219> NAME/KEY: misc_feature
172 <220> LOCATION: (1)..(1)
173 <221> OTHER INFORMATION: Xaa = Gla, which is gamma-carboxy-L-glutamic acid
174 <222> SEQUENCE: 5
W--> 182 Xaa Leu Tyr Glu Asn Val Gly Met Tyr Cys
175 <210> SEQUENCE: 10
176 <211> SEQ_ID_NO: 6
177 <212> LENGTH: 11
178 <213> TYPE: PRT
179 <214> ORIGIN: Artificial Sequence
180 <215> FEATURE:
181 <216> OTHER INFORMATION: Synthetic
182 <217> FEATURE:
183 <218> NAME/KEY: misc_feature
184 <219> LOCATION: (1)..(1)
185 <220> OTHER INFORMATION: Xaa = Gla(OtBu)2, which is di- tert-butoxy-gamma-carboxy-L-
glutam
186 <221> RACID:
187 <222> FEATURE:
188 <223> NAME/KEY: misc_feature
189 <224> LOCATION: (3)..(3)
190 <225> OTHER INFORMATION: Tyr at position 3 is modified to Tyr(tBu), which is tert-
butyltyrosine
191 <226> RACID:
192 <227> FEATURE:
193 <228> NAME/KEY: misc_feature
194 <229> LOCATION: (4)..(4)

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/998,350

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Input Set : A:\PTO.VSK.txt
 Output Set: N:\CRF4\12232002\I998350.raw

294 <222> LOCATION: .1...(1)
 295 <223> OTHER INFORMATION: Xaa = Adi, which is alpha-amino-adipic acid
 296 <224> FEATURE:
 297 <225> NAME/KEY: r:c_feature
 298 <226> LOCATION: .1...(1)
 299 <227> OTHER INFORMATION: Xaa has a CH₂CO- group attached
 300 <228> FEATURE:
 301 <229> NAME/KEY: r:c_feature
 302 <230> LOCATION: .(1)...10:
 303 <231> OTHER INFORMATION: Cys is an amide, i.e., C(O)NH
 304 <232> FEATURE:
 305 <233> NAME/KEY: r:c_feature
 306 <234> LOCATION: .1...(10)
 307 <235> OTHER INFORMATION: Xaa (Adi) and Cys are bridged together, making this peptide
 cyclic
 344
 345 <400> FREQUENCY: 8
W--> 309 Xaa Leu Tyr Glu Asn Val Gly Met Tyr Cys
 346 1 5 10
 347 <10> .RQ ID NO: 9
 348 <11> LENGTH: 10
 349 <12> TYPE: PRT
 350 <13> ORGANISM: Artificial Sequence
 351 <14> FEATURE:
 352 <15> OTHER INFORMATION: Synthetic
 353 <16> FEATURE:
 354 <17> NAME/KEY: r:c_feature
 355 <18> LOCATION: .1...(1)
 356 <19> OTHER INFORMATION: At position 1, Xaa = Adi, which is alpha-amino-adipic acid
 357 <20> FEATURE:
 358 <21> NAME/KEY: r:c_feature
 359 <22> LOCATION: .4...(4)
 360 <23> OTHER INFORMATION: At position 4, Xaa = Adi, which is alpha-amino-adipic acid
 361 <24> FEATURE:
 362 <25> NAME/KEY: r:c_feature
 363 <26> LOCATION: .(1)...10
 364 <27> OTHER INFORMATION: Cys is an amide, i.e., C(O)NH
 365 <28> FEATURE:
 366 <29> NAME/KEY: r:c_feature
 367 <30> LOCATION: .1...(10)
 368 <31> OTHER INFORMATION: Xaa (Adi) at position 1 and Cys are bridged together, making this

peptide cyclic

369 <400> FREQUENCY: 9

W--> 348 Xaa Leu Tyr Xaa Asn Val Gly Met Tyr Cys

370 1 5 10
 371 <10> .RQ ID NO: 10
 372 <11> LENGTH: 10
 373 <12> TYPE: PRT
 374 <13> ORGANISM: Artificial Sequence
 375 <14> FEATURE:

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/998,350

DATE: 12/23/2002
TIME: 14:13:24

Input Set : A:\PTO.VSK.txt
Output Set: N:\CRF4\12232002\I998350.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; Xaa Pos. 1
Seq#:2; Xaa Pos. 1,4
Seq#:3; Xaa Pos. 1
Seq#:4; Xaa Pos. 1
Seq#:5; Xaa Pos. 1
Seq#:6; Xaa Pos. 1
Seq#:7; Xaa Pos. 1
Seq#:8; Xaa Pos. 1
Seq#:9; Xaa Pos. 1,4
Seq#:10; Xaa Pos. 8
Seq#:11; Xaa Pos. 10
Seq#:12; Xaa Pos. 8
Seq#:13; Xaa Pos. 8,10
Seq#:14; Xaa Pos. 10
Seq#:18; Xaa Pos. 1
Seq#:19; Xaa Pos. 1

Invalid Line Length:

The rules require that a line not exceed 72 characters in length. This includes spaces.

Seq#:1; Line(s) 9

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/998,350

DATE: 12/23/2002

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Input Set : A:\PTO.VSK.txt

Output Set: N:\CRF4\12232002\I998350.raw

L:16 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:57 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0
L:96 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2 after pos.:0
L:129 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:0
L:162 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0
L:182 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
L:238 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0
L:270 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0
L:309 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0
L:348 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0
L:380 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0
L:441 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:0
L:474 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0
L:513 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:0
L:567 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0
L:641 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:0
L:677 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0